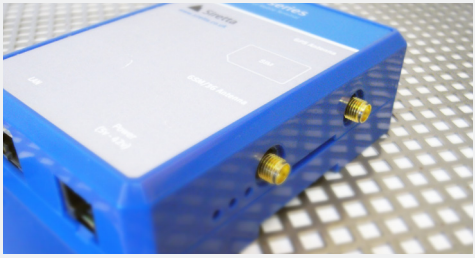
Siretta

inspired wireless technology



» Cellular Modems

» Antenna Systems

» RF Cable Assemblies

» RF Adaptors & Connectors

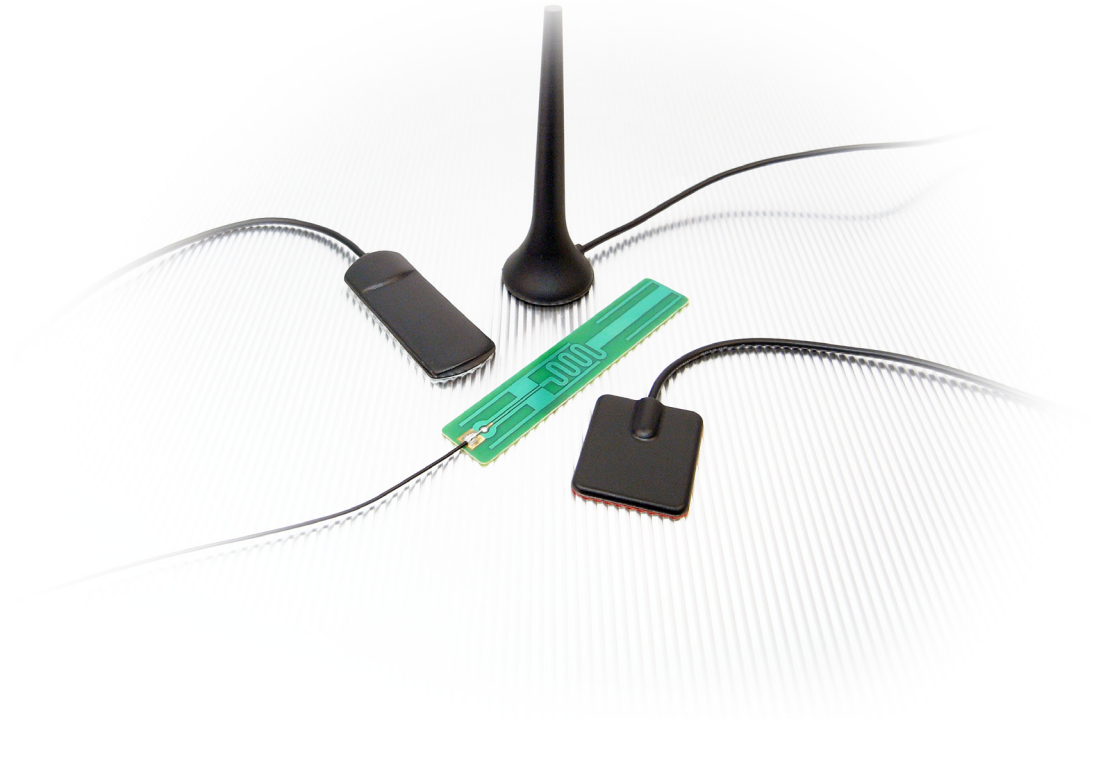
Advanced Wireless Products

Siretta
inspired wireless technology

Siretta

DESIGN, MANUFACTURE &SUPPLY

the widest range of quality antennas for the electronics market along with best range of industrial modems under one name. All at a competitive price point and with solid expertise to offer our customers..



We now supply some of the largest wireless customers with antennas, cables and M2M modems – many built to customer specification in conjunction with detailed design advice.

With 20 years' experience in the wireless M2M telemetry market, we design and supply to customer's applications on a global basis.
We focus on frequencies within the 76MHz to 5.8GHz range encompassing HF, VHF, ISM, GSM/GPRS, 3G/UMTS, 4G/LTE, and GPS frequencies.

Advanced Design Products

To meet the increasing need for wireless M2M connection, Siretta offer a range of technically advanced 2G / 3G / 4G modems, providing solutions for a wide range of applications. Designed and manufactured by us, we have taken customer requests and turned these into cutting edge, finished product modems for the 2G / 3G / 4G networks.

The functionality within the ZEST, ZETA, ZOOM, ZULU and ZEUS is significantly more advanced than most other modem manufacturers today, delivering excellent technical performance and great value for money.

Similarly, we have also have a range of 2G / 3G signal testers to help evaluate signal strength and antenna performance in the field. These are now used by many people and organisations for evaluating and datalogging reception of 2G and 3G networks in specific locations.

Customer Services

At Siretta we have a dedicated team of design engineers all available to help customise our products to your needs. Our experienced technical and sales staff are all contactable at our offices in Reading UK to discuss your application, requirements and suitable solution.

For more information contact:

+44 (0)118 976 9014

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About Modems and Testers

Machine to machine (M2M) connectivity and the 'Internet-of-Things' is dramatically changing the way that equipment and remote devices communicate, bringing wide reaching benefits in system function and efficiency. Wireless modems are at the heart of this revolution, enabling almost any application or device to become wireless, and in doing so reap the amazing benefits that M2M connectivity can offer.

Siretta is a leading supplier of wireless modems, offering a broad selection of products for this exciting market development. Fully designed and developed in house, we have taken our many years of wireless experience and produced a range of cutting edge products, offering excellent technical performance and great value for money.

The functionality within our modems is some of the most advanced on the market today, with a multi-level product range providing innovative solutions for all sectors and applications. From the entry level ZEST to the powerful Ethernet enabled ZEUS, our products combine ease of use and advanced features, with robust reliable performance for the most demanding of environments. With the added benefit of local design and engineering support from our UK office, Siretta is your ideal wireless connectivity partner.

ZEST

- Low Cost
- 2G / 3G
- Compact
- Essential features

Entry level modem offering RS232 / USB connectivity for the GPRS / UMTS networks.

See page 12 for more on the ZEST

ZETA

- 2G / 3G / 4G
- RS232 interface
- 5-60 input voltage
- GPS option

Fully featured GSM modem, the perfect solution for M2M communication.

See page 13 for more on the ZETA

ZOOM

- Integratable
- 2G / 3G / 4G
- GPS option
- EVK available

Embedded socket modem via 2x 20-way PCB pin sockets.

See page 14 for more on the ZOOM

ZULU

- USB / RS232
- DIN rail mounting
- Battery option
- 2G / 3G / 4G
- GPS option
- Battery option

Advanced USB modem with 210 MIPS ARM M4 processor.

See page 15 for more on the ZULU

ZEUS

- Ethernet interface with webserver
- DIN rail mounting
- 2G / 3G / 4G
- GPS option
- Battery option

Advanced 210 MIPS ARM Cortex M4 processor terminal with 10 Base-T Ethernet port.

See page 16 for more on the ZEUS

SNYPER

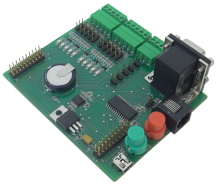
- 2G / 3G
- Summary screen
- Large LCD
- USB charging
- Rugged case

Cellular signal and network analyser finds the perfect GSM network for your application.

See page 17 for more on the SNYPER

ZOOM-EVK

- RS232 Port
- USB Interface
- Power 5v-42v
- GPIO
- Embedded
- ZOOM development platform

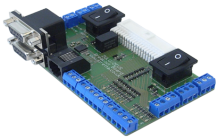


Evaluation and development platform for the ZOOM embedded socket modem.

See page 18 for more on the EVK

ZULU / ZEUS-EVK

- 32 bit ARM Cortex M4
- RS232 Port
- USB / Ethernet Interface
- Power 5v-42v
- GPIO



Evaluation and development platform for the ZULU / ZEUS modems.

See page 19 for more on the EVK

For more information contact:

+44 (0)118 976 9014

ZEST

Low Cost 2G / 3G Modem

- » RS232 and USB* serial port interface
- » Python script for customer application development
- » GPRS EU coverage
- » Dual band 900 / 1800MHz
- » Supply voltage capability 6-18 / 21V
- » AT command driven
- » Wall or DIN rail mountable
- » Compact size
- » 105 grams weight

The ZEST is an entry level industrial cellular modem, with serial RS232 and USB* ports, offering key functionality within a rugged plastic enclosure. The ZEST is ideal for M2M applications requiring a simple but reliable modem for GPRS data connection, using either a standard RS232 or USB* interface. The USB port is used for sending / receiving data, but in addition can be used for supplying power. The ZEST is a dual band GPRS modem providing EU coverage, for the EMEA and APAC regions. Further configurations including global quad band GPRS and 3G / UMTS are also available on request.

Despite its highly competitive price, the ZEST is built to the same exacting standards as the rest of the Siretta modem family. The ZEST will be a popular choice for many situations requiring just GPRS connectivity, and the flexible 6-18V power supply and a -40˚C to +85˚C operating temperature range allow the product to be used in most industrial applications.

* USB data port is only available on UMTS model.

ZETA

Fully Featured 2G / 3G / 4G Modem

- RS232 serial port interface
- USB serial port interface
- GPRS global coverage
- GPRS class 10
- 5 GPIO lines
- Wide supply voltage capability 5-42 / 60V
- AT command driven
- Compact size
- 101 grams weight

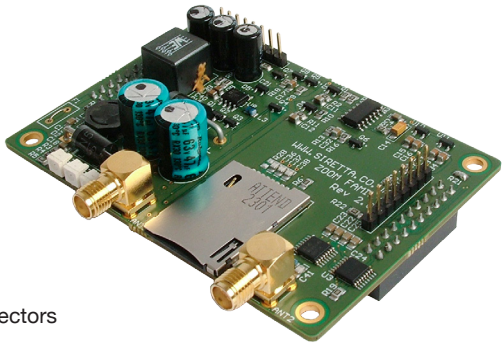
The ZETA range of GPRS modems offer advanced performance at a low cost, with a convenient RS232 interface. The range is suitable for a wide range of applications, and has been extensively tested for robust reliable performance. With an installation base at many large organisations, and in public spaces, the ZETA has built up a solid reputation for low cost, dependable performance over a number of years.

Capable of operating in the most demanding environments, the ZETA modems are ideally suited to M2M applications including remote monitoring and vehicles. A high level of cellular functions in a compact plug 'n' play housing allow simple integration into your system. With its small size and advanced set of features it fits perfectly into a wide range of devices and applications.

ZOOM

Embedded 2G / 3G / 4G Socket Modem

- » TTL or RS232 serial port interface
- » USB serial port interface
- » GPRS or 3G / UMTS global coverage
- » Available with GPS receiver
- » 10 GPIO lines
- » Wide supply voltage capability 5-42V
- » AT command driven
- » Compact size
- » Simple mounting by 2 x 20 way connectors
- » EVK development board available



The ZOOM series of GPRS and 3G / UMTS socket modems are fully designed, developed and ready to integrate into your equipment, easily, and with a low overall cost.

The ZOOM series answers the need for an economic, fully functional and tested cellular modem platform that can be easily incorporated into your equipment with little knowledge of modem technology. With a highly plug 'n' play design, the ZOOM offers a common platform across the range, enabling all technologies to be evaluated easily.

The ZOOM socket modems are designed to be plugged onto your own PCB via standard 2 x 20 way connectors. The two connectors incorporate TTL or RS232 interfaces, USB interface, 10 GPIO lines and power. The ZOOM series also has an unusually wide power supply capability of 5-42V, enabling compatibility with a wide range of applications.

ZULU

Advanced 2G / 3G / 4G USB Modem with 210 MIPS ARM Processor

- » USB serial port interface
- » RS232 serial port interface
- » GPRS, 3G / UMTS or 4G / LTE coverage
- » Available with GPS receiver
- » ARM Cortex M4 32bit processor
- » 10 GPIO lines
- » Wide supply voltage capability 5-42V
- » ADC, CAN, 1-wire and I²C interfaces
- » DIN rail mountable
- » 2000mAh battery option
- » EVK development board available
- » Convenient 36 way multi interface connector

The ZULU range of modems are amongst the most advanced and capable available today. The range is available as two main versions - with or without GPS. Further options include a 2000mAh battery and an upgrade of flash memory to a total of 128Mbit. The ZULU range can be used as a simple modem, or with application software within the GPRS / UMTS / LTE module. But its real strength, for the user, is as a comprehensive computing platform using its ARM Cortex M4 32bit processor connected to the wireless engine - all in one package. The ZULU design has been extensively tested and represents amazing value as a GPRS / UMTS / LTE connected powerful 32bit computing device.

The ZULU modems have an ARM Cortex M4 32bit processor as standard, independent of the wireless module, for customers to develop their software on. The ZULU has both USB and RS232 serial ports with 10 GPIO lines as standard. The ZULU is housed in a tough plastic enclosure that is either screw or DIN rail mountable.

ZEUS

Advanced 2G / 3G / 4G Ethernet Modem Router

- 10/100 Ethernet interface
- RS232 serial port interface
- GPRS, 3G / UMTS or 4G / LTE coverage
- Available with GPS receiver
- ARM Cortex M4 32bit processor
- 10 GPIO lines
- Wide supply voltage capability 5-42V
- ADC, CAN, 1-wire and I²C interfaces
- DIN rail mountable
- 2000mAh battery option
- EVK development board available
- Convenient 36 way multi interface connector

The ZEUS range of 3G / UMTS modems are amongst the most advanced and capable modems available today. The range is available as two main versions - with or without GPS. Further options include a 2000mAh battery and an upgrade of flash memory to a total of 128Mbit. The ZEUS range can be used as a simple modem or with application software within the UMTS module. But its real strength, for the user, is as a comprehensive computing platform using its ARM Cortex M4 32bit processor connected to the UMTS engine - all in one package. The ZEUS design has been extensively tested and represents amazing value as a UMTS connected powerful 32bit computing engine.

The ZEUS modems have an ARM Cortex M4 32bit processor as standard, independent of the wireless module, for customers to develop their software on. The ZEUS has an Ethernet port, an RS232 serial port and 10 GPIO lines as standard. The ZEUS is housed in a tough plastic enclosure that is either screw or DIN rail mountable.

SNYPER

2G / 3G Cellular Signal and Network Analyser

- 2G / 3G coverage versions
- Summary feature for consolidated view of network data
- Large easy to read LCD display
- Operates without SIM
- Logical menus and operation
- Long life rechargeable battery
- USB battery charger included
- Rugged and durable construction
- Supplied in a hard carrying case

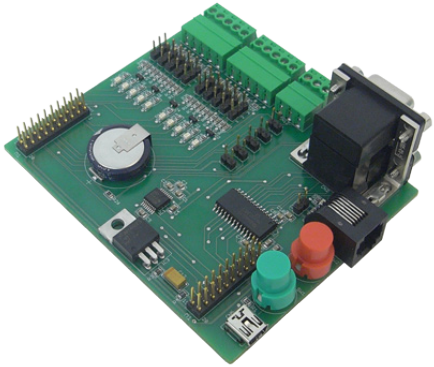
The SNYPER is a high performance signal and network analyser for the 2G / GPRS and 3G / UMTS networks, with a host of important features for the busy engineer and installer. Building on our many years of signal tester experience, the new SNYPER utilises the same design platform used in our advanced wireless modems to provide market leading performance and functionality, at a highly competitive price.

Used as an invaluable tool for the surveying and commissioning of wireless systems, the SNYPER can perform a number of different functions to determine optimum antenna placement, performance of existing installations or choice of network operator. As an example, the SNYPER can determine the strength of a particular network signal, or can review all available network signals in the area of use, and rank these in order of strength through its summary page. The summary page is an incredibly powerful feature allowing network operator choice to be made based on both signal strength and number of usable cells, with all data visible concurrently. The SNYPER also has a number of signal strength thresholds within the summary page, providing a more concise view where only signals above a certain dB level are of interest.

ZOOM-EVK Board

Modem Development for ZOOM

- » Development platform
- » Plugs directly onto ZOOM module
- » Ideal prototyping kit



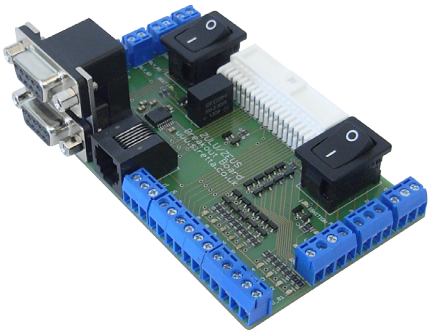
The ZOOM-EVK evaluation and development board is the perfect way of getting to know the ZOOM series of socket modems, and building an application for integration into your equipment. The ZOOM modem plugs directly onto the EVK providing convenient access to all of the ZOOM interfaces via the EVK's D-Sub, USB and terminal block connectors. This includes the TTL, RS232 and USB interfaces, allowing you to control the modem from a connected PC or embedded micro controller.

The ZOOM-EVK board comes complete with a multi region power supply, RS232/ USB cables, our Delta 2A GSM antenna and the Mike 3A GPS antenna, providing all the components for a working system - just add your choice of ZOOM modem.

ZULU / ZEUS-EVK Board

Modem Development for ZULU / ZEUS

- » Development platform
- » Includes accessories and antennas
- » Ideal prototyping kit



The ZULU/ZEUS-EVK evaluation and development board is the perfect way of working with the ZULU/ZEUS modems, and developing an application within the ARM Cortex processor. The EVK provides simple and convenient access to the ZULU/ZEUS interfaces through standard D-Sub and terminal block connectors.

The ZULU/ZEUS-EVK board also comes complete with a multi region power supply, 36way interface cable, RS232/USB (ZULU) or RS232/Ethernet (ZEUS) cables, a JTAG programming cable, our Delta 2A GSM antenna and the Mike 3A GPS antenna, providing all the components for a working system - just add your choice of ZULU/ZEUS modem.

Product Comparison

Matrix of Siretta Modems

	Software		Interfaces										Frequencies					
													2G / GPRS		3G / UMTS			4G / LTE
• Standard Feature o Option	IP Stack	AT Commands	RS232	USB	Ethernet	TTL	ADC	DAC	CAN	1-Wire	I2C	GPS	900 / 1800MHz	850 / 1900MHz	850 / 1900MHz	1700MHz	900 / 2100MHz	800 / 1800 / 2600MHz
ZEST-N-GPRS (EU)	•	•	•	•	-	-	-	-	-	-	-	-	-	•	-	-	-	-
ZEST-N-UMTS (EU)	•	•	•	•	-	-	-	-	-	-	-	-	-	•	-	-	•	-
ZETA-N-GPRS	•	•	•	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
ZETA-G-GPRS	•	•	•	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-
ZETA-N-UMTS	•	•	•	•	-	-	1	-	-	-	-	-	•	•	•	•	•	-
ZETA-G-UMTS	•	•	•	•	-	-	1	-	-	-	-	•	•	•	•	•	•	-
ZOOM-N-GPRS	•	•	-	•	-	•	1	-	-	-	-	-	•	•	-	-	-	-
ZOOM-G-GPRS	•	•	-	•	-	•	1	-	-	-	-	•	•	•	-	-	-	-
ZOOM-N-UMTS	•	•	-	•	-	•	1	-	-	-	-	-	•	•	•	•	•	-
ZOOM-G-UMTS	•	•	-	•	-	•	1	-	-	-	-	•	•	•	•	•	•	-
ZOOM-N-GPRS-RS232	•	•	•	•	-	-	1	-	-	-	-	-	•	•	-	-	-	-
ZOOM-G-GPRS-RS232	•	•	•	•	-	-	1	-	-	-	-	•	•	•	-	-	-	-
ZOOM-N-UMTS-RS232	•	•	•	•	-	-	1	-	-	-	-	-	•	•	•	•	•	-
ZOOM-G-UMTS-RS232	•	•	•	•	-	-	1	-	-	-	-	•	•	•	•	•	•	-
ZULU-N-GPRS	•	•	•	•	-	-	2	2	•	•	•	-	•	•	-	-	-	-
ZULU-G-GPRS	•	•	•	•	-	-	2	2	•	•	•	•	•	•	-	-	-	-
ZULU-N-UMTS	•	•	•	•	-	-	2	2	•	•	•	-	•	•	•	•	•	-
ZULU-G-UMTS	•	•	•	•	-	-	2	2	•	•	•	•	•	•	•	•	•	-
ZULU-N-LTE (EU)	•	•	•	•	-	-	2	2	•	•	•	-	•	•	-	-	•	•
ZULU-G-LTE (EU)	•	•	•	•	-	-	2	2	•	•	•	•	•	•	-	-	•	•
ZEUS-N-GPRS	•	•	•	-	•	-	2	2	•	•	•	-	•	•	-	-	-	-
ZEUS-G-GPRS	•	•	•	-	•	-	2	2	•	•	•	•	•	•	-	-	-	-
ZEUS-N-UMTS	•	•	•	-	•	-	2	2	•	•	•	-	•	•	•	•	•	-
ZEUS-G-UMTS	•	•	•	-	•	-	2	2	•	•	•	•	•	•	•	•	•	-
ZEUS-N-LTE (EU)	•	•	•	-	•	-	2	2	•	•	•	-	•	•	-	-	•	•
ZEUS-G-LTE (EU)	•	•	•	-	•	-	2	2	•	•	•	•	•	•	-	-	•	•

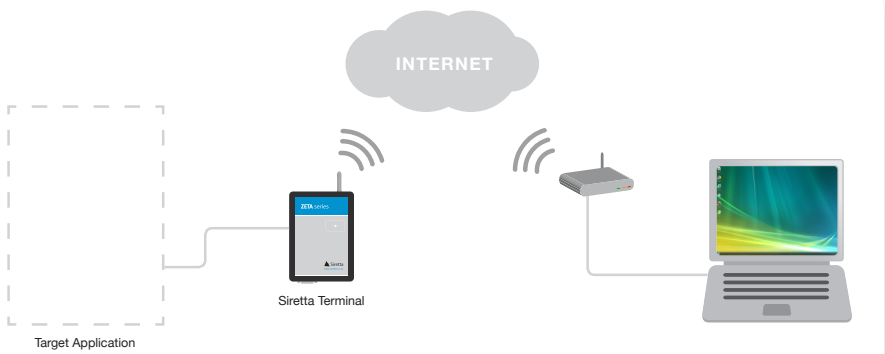
* Only with battery option fitted

GPIO					Other					Power		
ARM Cortex M4 Processor	GPIO (Input/Output)	GPIO Input Voltage	GPIO Output Voltage	0.6A Relay	Dimensions L x H x D (mm)	Weight	Accelerometer	Operating Temperature	DIN Rail Mounting	Power Supply	2000mAh Battery	USB Charging *
-	-	-	-	-	75 x 85 x 28	105g	-	-40 to 80˚C	•	6-18V	-	-
-	-	-	-	-	75 x 85 x 28	105g	-	-40 to 80˚C	•	6-18V	-	-
-	5	35V	3.3V	-	93 x 67 x 28	101g	-	-40 to 85˚C	-	5-60V	-	-
-	5	35V	3.3V	-	93 x 67 x 28	101g	-	-40 to 85˚C	-	5-60V	-	-
-	5 (4/1)	35V	0-42V	-	93 x 67 x 28	101g	-	-30 to 80˚C	-	5-60V	-	-
-	5 (4/1)	35V	0-42V	-	93 x 67 x 28	105g	-	-30 to 80˚C	-	5-60V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
-	10 (4/6)	3.3V	3.3V	-	85 x 60 x 24	54g	-	-30 to 80˚C	-	5-42V	-	-
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	125g	•	-30 to 80˚C	•	5-42V	o	•
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	
•	9 (5/4)	35V	0-42V	•	134 x 74 x 33	143g	•	-30 to 80˚C	•	5-42V	o	

V-Link232 Software

Cellular Wireless Virtual Cable Replacement

Any Siretta cellular terminal with V-Link232 software becomes an intelligent GPRS / UMTS, RS232 / USB cable replacement solution, ideal for wirelessly connecting remote equipment.



V-Link 232 has been designed to create an out-of-box usable wireless replacement to an RS232 / USB cable of any length.

V-Link232 enables any Siretta modem to be able to operate as a stand-alone modem without the need for any intelligence external to the modem - thus enabling the modem to manage the connection of remote equipment to a central location for its management of control.

Applications where there is no host intelligence or where the user needs to control the modem remotely will find the unique and simple to operate V-Link232 software indispensable.

V-Link232 enabled modems can also be used in multiple remote access applications.

V-Link232 is available as an option on any of the Siretta modem ranges.

Flexible with modes of operation

The V-Link232 is extremely flexible and operates in one of two modes as desired - Client or Server mode. It also has some great additional features, that, in all, make V-Link232 virtual cable connection even more compelling.

In both modes any data received to the serial port of a V-Link232 enabled terminal will be forwarded over the GPRS network to the IP / port specified, and any data received from the server via the GPRS network will be forwarded to the serial port of the modem. This then creates a virtual cable replacement between two V-Link232 enabled modem endpoints placed anywhere and does not require the connected equipment to manage the connection. This extremely powerful feature of the V-Link232 enabled modems can be found in many installed applications as, the V-Link232 features, coupled with robust build of the Siretta modem range, make a compelling overall solution.

» Client Mode

In the Client mode V-Link232 acts as a client, simply connecting the modem to a remote server at a pre-specified IP address and port. It can either be setup as 'always connected', or to connect only when data is received on the serial port. Once set up, the modem with V-Link232 need no further intervention to remain in full client mode.

» Server Mode

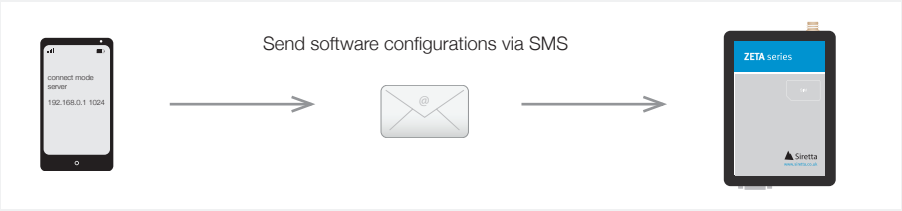
In the Server mode V-Link232 acts as a server, where the modem listens for incoming connections from a remote client on a specified port. Additionally a source IP can be specified, and only connections from this IP will be accepted.

Configuration Tool

The windows based application allows you to configure all settings available in one place with a single window. The settings are then saved in non-volatile memory and are activated the next time the modem is started up.

SMS Configuration Commands

A mobile phone is used for this method of configuration employing the SMS command service.



Accessories

Optional Modem Accessories

	Part No	Description	Frequencies					
			ZEST	ZETA GPRS	ZETA UMTS V2	ZOOM	ZULU	ZEUS
Power	32889 PSU MULTI ADAPTOR	Compact power supply with interchangeable connectors for UK, EU, US and Australian standard mains voltage connection		•	•	•	•	•
	31557 POWER CABLE	Power cable with open end for termination to user power supply, 1Mtr long		•	•	•	•	•
	34677 ZEST PSU MULTI ADAPTOR	Compact power supply with interchangeable connectors for UK, EU, US and Australian standard mains voltage connection	•					
Interface	29284 RS232 CABLE	Standard RS232 interface cable, male to female, 2Mtrs long	•	•	•	•	•	•
	29891 RS232 TO USB CABLE	RS232 male to USB-A interface cable, 1.5Mtrs long		•				
	33481 USB GPIO CABLE	Mini USB right angle interface cable with other end stripped and tinned for GPIO connection, 1Mtr long		•				
	34777 GPIO CABLE 10 WAY 0.5M	Connection cable for 10 position GPIO, 0.5Mtrs long			•			
	34436 USB CABLE	Standard USB interface cable, USB-A to USB Mini-B, 2Mtrs long	•		•	•	•	
	29286 CAT5E ETHERNET CABLE	Standard RJ-45 Ethernet cable, 1Mtr long						•
	34212 INTERFACE CABLE 36 WAY 0.5M	Connection cable for 36 position multi interface, 0.5Mtrs long					•	•
	34218 INTERFACE CABLE 36 WAY 1M	Connection cable for 36 position multi interface, 1Mtr long					•	•
Other	34388 JTAG PROGRAMMING CABLE	Programming cable for JTAG port connection, terminated to 20 way JTAG header					•	•
	33755 2AH BATTERY	Retrofittable 2000mAh battery for backup power security					•	•

About Antennas

Siretta Antennas was formed to design, manufacture and supply the widest range of antennas for the wireless M2M market. Covering many frequencies and mounting methods, Siretta also provides customised antenna solutions ensuring all of our customers' needs are fulfilled.

Thriving on excellent customer service, Siretta offers short lead times, competitive prices and round the clock technical support.

For more information contact:

+44 (0)118 976 9014

Antenna Ranges

Breakdown of Antennas by Range

When searching for your antenna solution, we have organised our antennas into different ranges depending on mounting methods within popular wireless technologies which makes selecting your ideal antenna easy.

Alpha Range	Self-adhesive range of antennas, great for attaching inside vehicles and enclosures where they are not seen.
Delta Range	Knuckle joint, stub, right angle stub and whip antennas, perfect for direct connection into your equipment.
Echo Range	PCB or ceramic types of embedded antennas suitable for system integration.
Mike Range	Magnetic base range of antennas, great for temporary installations on metal surfaces.
Oscar Range	External or wall mount range of antennas for static locations.
Tango Range	Through hole mount antennas with a stud and nut, suitable for fixing onto panels.

Within these families you will find different variations of antennas including sizing and frequencies. All of our antennas are able to be customized to fit your specification, whether it is changing the connector type or increasing the length of cable – Siretta are here to help.

Alpha Range - Self Adhesive

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Alpha 1A	•	•				•	35 57
Alpha 3A	•	•				•	35 57
Alpha 4A				•			45
Alpha 6	•			•			49
Alpha 7	•			•			49
Alpha 8	•	•			•		35 53
Alpha 9	•			•			49
Alpha 10						•	57
Alpha 11	•	•			•		36
Alpha 14	•	•			•		36

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Alpha 15	•	•			•		36
Alpha 16						•	58

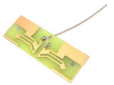
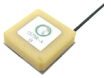
Delta Range - Direct Connect

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Delta 1A	•	•					37 53
Delta 1C	•						37
Delta 2A	•	•					37 53
Delta 2C	•						38
Delta 5					•		54
Delta 5A					•		54
Delta 6A	•	•					38

Antenna Finder

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Delta 6B						•	58
Delta 6C						•	58
Delta 7A						•	59
Delta 7B	•	•					38
Delta 8A						•	59
Delta 11					•		54
Delta 12					•		55
Delta 12A					•		55
Delta 12B					•		55
Delta 14						•	59
Delta 15						•	60

Echo Range - Embedded

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Echo 1A	•	•					39
Echo 2 	•	•			•	•	39 56 60
Echo 5				•			45
Echo 11						•	60
Echo 12	•	•					39
Echo 14	•	•	•		•		40 56
Echo 17						•	60
Echo 18						•	60
Echo 19				•			45
Echo 26				•			46
Echo 27 				•			46

Antenna Finder

Mike Range - Magnetic Mount

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Mike 1A	•	•					40
Mike 1B	•				•		40
Mike 2A	•	•					41
Mike 3A				•			46

Oscar Range - Wall Mount

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Oscar 1	•	•			•		41
Oscar 3A	•						41
Oscar 16	•						42
Oscar 17	•	•					42
Oscar 18	•	•				•	42

Tango Range - Through Hole

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Tango 1	•	•					43
Tango 2	•	•				•	60
Tango 6A	•			•			50
Tango 6B	•			•		•	50
Tango 11A	•	•					43
Tango 14	•	•					43
Tango 15	•			•		•	50
Tango 16	•			•			51
Tango 17	•	•					44
Tango 18	•	•					44
Tango 19	•			•			51

Antenna Finder

Antenna	GSM	UMTS	LTE	GPS	ISM	WiFi	Page/s
Tango 20				•			47
Tango 20A				•			47
Tango 21				•			47
Tango 22	•	•		•		•	51
Tango 23						•	62
Tango 24						•	62
Tango 25						•	62
Tango 25A						•	62
Tango 26						•	62
Tango 27	•	•					34

Alpha 1A - T-Bar Antenna

ADHESIVE

Frequencies	850, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Vertical
Size	130 x 11 x 4mm
Cable	RG174

Cable length and connector as required

Alpha 3A - Small Flat Blade Antenna

ADHESIVE

Frequencies	850, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2.15dBi
VSWR	<1.5:1
Polarization	Vertical
Size	75 x 25 x 2.5mm
Cable	RG174

Cable length and connector as required

Alpha 8 - Flat Blade Antenna (IP67)

ADHESIVE

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<1.5:1
Polarization	Vertical
Size	113 x 21 x 3mm
Cable	RG174

Cable length and connector as required

ADHESIVE

Cable length and connector as required

Alpha 11 - Flat Blade Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2.5dBi
VSWR	<1.5:1
Polarization	Vertical
Size	115 x 22 x 4mm
Cable	RG174

ADHESIVE

Cable length and connector as required

Alpha 14 - Thin Plate Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2
Polarization	Vertical
Size	40 x 35.5 x 2mm
Cable	RG174

ADHESIVE

Cable length and connector as required

Alpha 15 - Puck Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2.5:1
Polarization	Vertical
Size	ø71.5 x 14.5mm
Cable	RG174

Delta 1A - Stubby Antenna

DIRECT CONNECT

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Vertical
Size	56mm
Connector	SMA male

Delta 1C - Stubby Antenna

DIRECT CONNECT

Frequencies	850, 900, 1800, 1900MHz
Operating temp	-45 to +75°C
Impedance	50 ohm
Gain	2.16dBi
VSWR	<1.5 to 1.7:1
Polarization	Vertical
Size	48 x 8mm
Connector	SMA male

Delta 2A - Right Angle Stubby Antenna

DIRECT CONNECT

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Veritcal
Size	53 x 7.3mm
Connector	SMA male

DIRECT CONNECT

Delta 2C - Right Angle Stubby Antenna

Frequencies	850, 900, 1800, 1900MHz
Operating temp	-45 to +75°C
Impedance	50 ohm
Gain	2.15dB
VSWR	<1.5:1 to < 1.7:1
Polarization	Vertical
Size	45 x 8mm
Connector	SMA male / SMA male RP

DIRECT CONNECT

Delta 6A - Hinged Antenna

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	6.8dB (peak)
VSWR	<2:1
Polarization	Vertical
Size	187.5 x 9.6mm
Connector	SMA male

DIRECT CONNECT

Delta 7B - ¼ Wave Hinged Antenna

Frequencies	850, 900, 1800, 1900MHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	1dB
VSWR	<2.0:1
Polarization	Vertical
Size	110 x 10mm
Connector	SMA male

Echo 1A - PCB Antenna

EMBEDDED

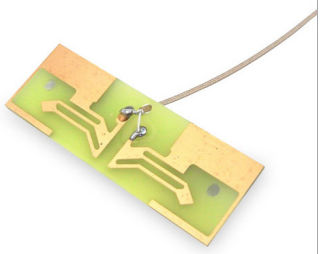
Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to 85°C
Impedance	50 ohm
Gain	3.66dB @ 2.1GHz
VSWR	<2.0:1
Polarization	Vertical
Size	36 x 6 x 0.6mm
Cable	1.13mm Coax

Cable length and connector as required

Echo 2 - PCB Antenna

EMBEDDED

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<1.5:1
Polarization	Vertical
Size	75 x 25 x 1mm
Cable	1.13mm Coax



Cable length and connector as required

Echo 12 - PIFA Antenna

EMBEDDED

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-35 to +85°C
Impedance	50 ohm
Gain	0.67 to 5.25dB
VSWR	3.0:1 max
Polarization	Linear
Size	24 x 5.5 x 4.4mm
Connector	Solder

EMBEDDED

Cable length and connector as required

Echo 14 - PCB Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.6GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	0dBi
VSWR	3.2:1
Polarization	Vertical
Size	20 x 105 x 1mm
Cable	1.13mm Coax

MAGNETIC MOUNT

Cable length and connector as required

Mike 1A - ¼ Wave Antenna

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2:1
Polarization	Vertical
Size	105 x 32mm
Cable	RG174

MAGNETIC MOUNT

Cable length and connector as required

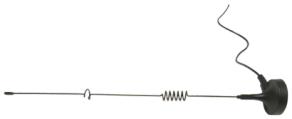
Mike 1B - ¼ Wave Antenna

Frequencies	850, 868, 900, 1800, 1900MHz
Operating temp	-45 to +75°C
Impedance	50 ohm
Gain	3.5dBi
VSWR	<1.5:1
Polarization	Vertical
Size	95 x 30mm
Cable	RG174

Mike 2A - ½ Wave Antenna

MAGNETIC MOUNT

Frequencies	850, 900, 1800, 1900, 2100MHz
Operating temp	-40 to +75°C
Impedance	50 ohm
Gain	5dBi
VSWR	<2:1
Polarization	Vertical
Size	311mm
Cable	RG174



Cable length and connector as required

Oscar 1 - Bracket Antenna (IP67)

WALL MOUNT

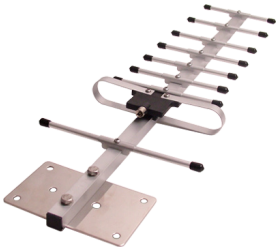
Frequencies	850, 900, 1800, 1900MHz
Operating temp	-30 to +80°C
Impedance	50 ohm
Gain	11dBi
VSWR	<1.6
Polarization	Vertical
Size	570 x 180 x 36mm
Connector	TNC female

Cable length and connector as required

Oscar 3A - Yagi Antenna

WALL MOUNT

Frequencies	850, 900, 1800, 1900MHz
Operating temp	-30 to +80°C
Impedance	50 ohm
Gain	11dBi
VSWR	<1.6
Polarization	Vertical
Size	570 x 180 x 36mm
Connector	TNC female



Cable length and connector as required

WALL MOUNT

Cable length and connector as required

Oscar 16 - Yagi Antenna

Frequencies	850, 900, 1800, 1900MHz
Operating temp	-30 to +70°C
Impedance	50 ohm
Gain	12dBi
VSWR	<2:1
Polarization	Vertical/Horizontal
Size	170 x 35 x 147mm
Cable	RG58

WALL MOUNT

Cable length and connector as required

Oscar 17 - Omnidirectional Antenna

Frequencies	900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +80°C
Impedance	50 ohm
Gain	10dBi
VSWR	<1.6
Polarization	Linear Vertical
Size	ø34 x 850mm
Connector	TNC female

WALL MOUNT

Cable length and connector as required

Oscar 18 - Yagi Antenna

Frequencies	850, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	10dBi
VSWR	<2.0:1
Polarization	Vertical/Horizontal
Size	294 x 210 x 85mm
Connector	N-Type female

Tango 1 - Low Profile Antenna

THROUGH HOLE

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<1.5:1
Polarization	Vertical
Size	95 x 42 x 17mm
Cable	RG174

Cable length and connector as required

Tango 11A - Puck Antenna (IP67)

THROUGH HOLE

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	3dBi
VSWR	<1.8
Polarization	Linear vertical
Size	ø80 x 23mm
Cable	RG174

Cable length and connector as required

Tango 14 - Low Profile Antenna (IP65)

THROUGH HOLE

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2.15dB
VSWR	<2:1
Polarization	Vertical
Size	ø94 x 18mm
Cable	RG174

Cable length and connector as required

THROUGH HOLE

Cable length and connector as required

Tango 17 - Waterproof Antenna (IP67)

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +80°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2
Polarization	Linear
Size	ø68 x 35mm
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 18 - ½ Wave Antenna (IP67)

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	4dBi
VSWR	<1.8:1
Polarization	Vertical
Size	320mm
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 27 - Puck Antenna (IP67)

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-30 to +65°C
Impedance	50 ohm
Gain	2.16dBi
VSWR	≤2 : 1
Polarization	
Size	ø46 x 15mm
Cable	RG174

Alpha 4A - GPS Active Antenna (IP67)

ADHESIVE

Frequencies	1575.42MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	26±2dB
VSWR	<1.5:1
Polarization	RHCP
Size	37.6 x 33.8 x 13mm
Cable	RG174

Cable length and connector as required

Echo 5 - 13x13mm Active GPS Patch

EMBEDDED

Frequency	1575.42MHz
Operating temp	-20 to +65°C
Impedance	50 ohm
Gain (LNA)	18dB
VSWR	1.5:1
Polarization	RHCP
Size	13.4 x 13.4 x 8mm
Cable	1.13mm Coax

Cable length and connector as required

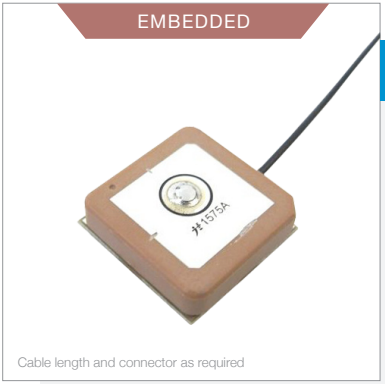
Echo 19 - 10x10mm Active GPS Patch

EMBEDDED

Frequencies	1575.42MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	16dB
VSWR	1.8:1
Polarization	RHCP
Size	10 x 10 x 6.2mm
Cable	1.13mm Coax

Cable length and connector as required

EMBEDDED

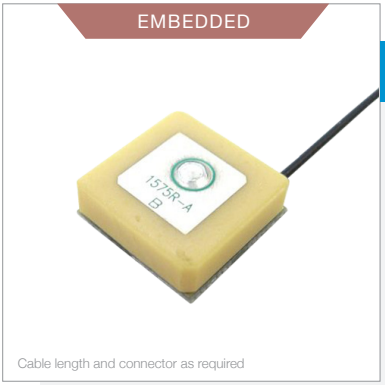


Cable length and connector as required

Echo 26 - 18.6 x 18.6mm Active GPS Patch

Frequencies	1575.42MHz (GLONASS option available)
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	28dB
VSWR	<1.5:1
Polarization	Vertical
Size	18.6 x 18.6 x 7.5mm
Cable	1.13mm Coax

EMBEDDED



Cable length and connector as required

Echo 27 - 15 x 15mm Active GPS Patch

Frequencies	1575.42MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	22dB
VSWR	<1.5:1
Polarization	Vertical
Size	15 x 15 x 7.5mm
Cable	1.13mm Coax

MAGNETIC MOUNT

Cable length and connector as required

Mike 3A - Dual Mount GPS Antenna **(IP67)**

Frequencies	1575.42MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	28dB
VSWR	2.0 max
Polarization	RHCP
Size	47 x 35 x 17mm
Cable	RG174

Tango 20 - Low Profile GPS Antenna (IP67)

THROUGH HOLE

Frequencies	1575.42MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain (LNA)	28dB
VSWR	<1.5
Polarization	RHCP
Size	ø46.6 x 14.5mm
Cable	RG174

Cable length and connector as required

Tango 20A - Low Profile GPS/Glonass (IP67)

THROUGH HOLE

Frequencies	1592 +- 3MHz
Operating temp	-40 to +85°C
Impedance	50ohm
Gain (LNA)	28dB
VSWR	<2.0
Polarization	RHCP
Size	ø46.6 x 14.5mm
Cable	RG174

Cable length and connector as required

Tango 21 - GPS Compact Patch Antenna

THROUGH HOLE

Frequencies	1575.42 MHz
Operating temp	-40 to +85°C
Impedance	50ohm
Gain (LNA)	28dB
VSWR	<2.0
Polarization	RHCP
Size	30.5 x 30.5 x 13.9mm
Cable	RG178

Cable length and connector as required

Alpha 6 - GSM/GPS Puck Antenna (IP68)

ADHESIVE

Frequencies	850, 900, 1575.42, 1800, 1900MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GPS Gain (LNA)	28dB
GSM Gain	2dBi @ 900MHz / 1dBi @ 1800MHz
VSWR	2.1
Polarization	GPS - RHCP, GSM - Vertical
Size	ø71 x 14mm
Cable	RG174

Cable length and connector as required

Alpha 7 - GSM/GPS Puck Antenna

ADHESIVE

Frequencies	900, 1575.42, 1800MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GPS Gain (LNA)	27dB
GSM Gain	0dBi
VSWR	<2.0 : 1
Polarization	GPS - RHCP, GSM - Vertical
Size	ø50 x 17.5mm
Cable	RG174

Cable length and connector as required

Alpha 9 - GSM/GPS Puck Antenna

ADHESIVE

Frequencies	900, 1575.42, 1800MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GPS Gain	27dB (LNA)
GSM Gain	2dBi
VSWR	2.0 max
Polarization	RHCP
Size	ø80 x 14mm
Cable	RG174

Cable length and connector as required

THROUGH HOLE

Cable length and connector as required

Tango 6A - GSM/GPS Antenna (IP66)

Frequencies	850, 900, 1575.42, 1800, 1900MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	2dBi @ 900MHz / 2dBi @ 1800MHz
GPS Gain	28dB (LNA)
VSWR	1.5:1
Polarization	RHCP
Size	88 x 53.8 x 62mm
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 6B - GSM/GPS/WiFi Antenna (IP66)

Frequencies	850, 900, 1575.42, 1800, 1900MHz, 2.4-2.5GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	GSM 2dBi / WiFi 2.15dBi
GPS Gain	GPS 28dB (LNA)
VSWR	1.5:1
Polarization	GSM - Vertical / GPS - RHCP
Size	88 x 53.8 x 62mm
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 15 - GSM/GPS Antenna (IP65)

Frequencies	850, 900, 1575.42, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	2.15dBi
GPS Gain	25dBi (LNA)
VSWR	<2.0 : 1
Polarization	GSM - Vertical / GPS - RHCP
Size	ø94 x 15mm
Cable	RG174

Tango 16 - GSM/GPS Antenna (IP67)

THROUGH HOLE

Frequencies	850, 900, 1575.42, 1800, 1900MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	GSM 2dBi,
GPS Gain	28dBi (LNA)
VSWR	<1.5
Polarization	GSM - Linear / GPS - RHCP
Size	ø50 x 48mm
Cable	RG174

Cable length and connector as required

Tango 19 - GSM/GPS Antenna (IP67)

THROUGH HOLE

Frequencies	850, 900, 1575.42, 1800, 1900MHz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	2dBi @ 900MHz / 1dBi @ 1900MHz
Gain (LNA)	28dBi
VSWR	GSM - 2.0 / GPS - 1.5:1
Polarization	GSM - Vertical / GPS - RHCP
Size	ØØ46 x 14.5mm
Cable	RG174

Cable length and connector as required

Tango 22 - GSM/GPS/WiFi Antenna (IP67)

THROUGH HOLE

Frequencies	850, 900, 1575.42, 1800, 1900MHz, 2.1, 2.4Ghz
Operating temp	-40 to +85°C
Impedance	50 ohm
GSM Gain	2dBi / WiFi 0dBi
GPS Gain	28dBi (LNA)
VSWR	GSM - 2.0 / GPS - 1.5 / WiFi - 2.0
Polarization	GSM - Vertical / GPS - RHCP
Size	ø80 x 15mm
Cable	RG174

Cable length and connector as required

Alpha 8 - Blade Antenna (IP67)

ADHESIVE

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2:1
Polarization	Vertical
Size	113 x 21 x 3mm
Cable	RG174

Cable length and connector as required

Delta 1A - Stubby Antenna

DIRECT CONNECT

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Vertical
Size	56mm
Connector	SMA male

Delta 2A - Right Angle Stubby Antenna

DIRECT CONNECT

Frequencies	850, 900, 1800, 1900MHz, 2.1GHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Veritcal
Size	53 x 7.3mm
Connector	SMA male

DIRECT CONNECT

Delta 5 - Flexi Antenna

Frequencies	868MHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	3dBi
VSWR	<2:1
Polarization	Vertical
Size	85mm
Connector	SMA male

DIRECT CONNECT

Delta 5A - Flexi Antenna

Frequencies	868MHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	3dBi
VSWR	<2:1
Polarization	Vertical
Size	100mm
Connector	SMA male

DIRECT CONNECT

Delta 11 - Flexi Antenna

Frequencies	433MHz
Operating temp	-40 to +75°C
Impedance	50 ohm
Gain	2.15dB
VSWR	<2.0 : 1
Polarization	Vertical
Size	90.2 x 11.8mm
Conector	SMA Male

Delta 12 - Flexi Whip Antenna

DIRECT CONNECT

Frequencies	151/173MHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	3dBi
VSWR	≤2.0:1
Polarization	Vertical
Size	130mm
Connector	SMA male, BNC male

Delta 12A - Flexi Whip Antenna

DIRECT CONNECT

Frequencies	433/458MHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	3dBi
VSWR	≤2.0:1
Polarization	Vertical
Size	130mm
Connector	SMA male, BNC male

Delta 12B - Flexi Whip Antenna

DIRECT CONNECT

Frequencies	869MHz
Operating temp	-30 to +75°C
Impedance	50 ohm
Gain	3dBi
VSWR	≤2.0:1
Polarization	Vertical
Size	130mm
Connector	SMA male / BNC male

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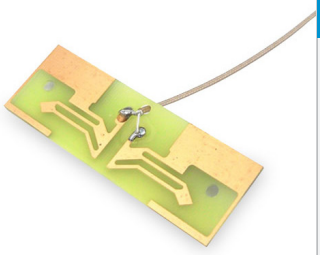

Cable length and connector as required

Echo 2 - PCB Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<1.5:1
Polarization	Vertical
Size	75 x 25 x 1mm
Cable	1.13mm Coax

EMBEDDED

Cable length and connector as required

Echo 14 - PCB Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.6GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	0dBi
VSWR	3.2:1
Polarization	Vertical
Size	20 x 105 x 1mm
Cable	1.13mm

Alpha 1A - T-Bar Antenna

ADHESIVE

Frequencies	850, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	2 max
Polarization	Vertical
Size	130 x 11 x 4mm
Cable	RG174

Alpha 3A - Small Flat Blade Antenna

ADHESIVE

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.4-2.5GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2.15dB
VSWR	<2.0 : 1
Polarization	Linear
Size	75 x 25 x 2.5mm
Cable	RG174

Cable length and connector as required

Alpha 10 - Blade Antenna

ADHESIVE

Frequencies	2.4-2.5GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	3.03 - 2.6dBi
VSWR	<1.5:1
Polarization	Vertical
Size	115 x 22 x 4mm
Cable	RG174

Cable length and connector as required

ADHESIVE

Cable length and connector as required

Alpha 16 - Thin Plate Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-40 to +60°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2.0:1
Polarization	Vertical
Size	35.5 x 39.9 x 2mm
Cable	RG174

DIRECT CONNECT

Delta 6B - Hinged Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +65°C
Impedance	50 ohm
Gain	5dBi
VSWR	<2.0:1
Polarization	Vertical
Size	196 x 12.5mm
Connector	SMA male / SMA male RP

DIRECT CONNECT

Delta 6C - Hinged Antenna

Frequencies	2.4, 5.8GHz
Operating temp	-20 to +65°C
Impedance	50 ohm
Gain	5dBi
VSWR	<2.0:1
Polarization	Vertical
Size	196 x 12.5mm
Connector	SMA male / SMA male RP

DIRECT CONNECT

Delta 7A - Hinged Antenna

Frequencies	2.4, 5.8GHz
Operating temp	-20 to +65°C
Impedance	50 ohm
Gain	1.5 - 2.1dBi
VSWR	<2.0:1
Polarization	Vertical
Size	110 x 10mm
Connector	SMA male / SMA male RP

DIRECT CONNECT

Delta 8A - Stubby Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	0dBi
VSWR	<2:1
Polarization	Vertical
Size	27mm
Connector	SMA male / SMA male RP

DIRECT CONNECT

Delta 14 - Stubby Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2.0:1
Polarization	Vertical
Size	56mm
Connector	SMA male RP

DIRECT CONNECT

Delta 15 - Right Angle Stubby Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2.0:1
Polarization	Vertical
Size	53.5mm
Connector	SMA male RP

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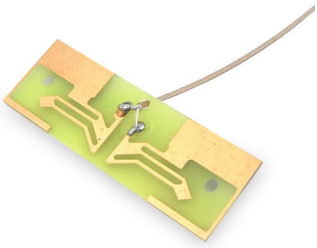


Cable length and connector as required

Echo 2 - PCB Antenna

Frequencies	850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2dBi
VSWR	<1.5:1
Polarization	Vertical
Size	75 x 25 x 1mm
Cable	1.13mm Coax

EMBEDDED

Cable length and connector as required

Echo 11 - PCB Antenna

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +65°C
Impedance	50 ohm
Gain	2.6dBi
VSWR	<1.6:1
Polarization	Vertical
Size	45 x 10 x 1mm
Cable	1.13mm Coax

Echo 17 - PCB Antenna

EMBEDDED

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	2.6dBi
VSWR	2.0 : 1
Polarization	Vertical
Size	45 x 10 x 0.6mm
Cable	1.13mm Coax

Cable length and connector as required

Echo 18 - PCB Antenna

EMBEDDED

Frequencies	2.4 - 2.5GHz
Operating temp	-20 to +60°C
Impedance	50 ohm
Gain	2.6dBi
VSWR	2.0:1
Polarization	Vertical
Size	37 x 0.6mm
Cable	1.13mm Coax

Cable length and connector as required

Tango 2 - PCB Antenna

THROUGH HOLE

Frequencies	800, 900, 1800, 1900MHz, 2.1, 2.4HHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	2.2dBi
VSWR	<1.5:1
Polarization	Vertical/Horizontal
Size	75 x 80 x 10mm
Cable	RG174

Cable length and connector as required

THROUGH HOLE

Cable length and connector as required

Tango 23 - Puck Antenna (IP67)

Frequencies	2.4 - 2.5GHz, 5.1 - 5.8GHz
Operating temp	-40 to +85°C
Impedance	50 ohm
Gain	3dBi @ 2.4GHz; 5dBi @ 5GHz
VSWR	<1.7:1
Polarization	Vertical
Size	ø80 x 23mm (not including screw thread)
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 24 - Puck Antenna (IP67)

Frequencies	2.4 - 2.5GHz
Operating temp	-30 to +60°C
Impedance	50 ohm
Gain	3dBi
VSWR	<1.5:1
Polarization	Vertical
Size	ø40 x 15mm (not including screw thread)
Cable	RG174

THROUGH HOLE

Cable length and connector as required

Tango 25 - Miniature Antenna (IP65)

Frequencies	2.4 - 2.5GHz
Operating temp	-30 to +60°C
Impedance	50 ohm
Gain	2dBi
VSWR	<2.0:1
Polarization	Vertical
Size	ø22 x 22mm (not including screw thread)
Cable	RG174

Tango 25A - Miniature Antenna (IP65)

THROUGH HOLE

Cable length and connector as required

Frequencies	2.4 - 2.5GHz, 5.1 - 5.8GHz
Operating temp	-30 to +60°C
Impedance	50 ohm
Gain	2dBi @ 2.4GHz / 5dBi @ 5GHz
VSWR	<2.0:1
Polarization	Vertical
Size	ø22 x 22mm (not including screw thread)
Cable	RG174

Tango 26 - Miniature Antenna (IP65)

THROUGH HOLE

Cable length and connector as required

Frequencies	2.4 - 2.5GHz
Operating temp	-30 to +60°C
Impedance	50 ohm
Gain	0.5dBi @ 2.4GHz
VSWR	<2.0:1
Polarization	Vertical
Size	ø22.3 x 14.75mm (not including screw thread)
Cable	RG174

About RF Cables

Siretta RF cable assemblies are generally used as an adaptor to connect two devices in RF signal transmission – typically a wireless module and antenna.

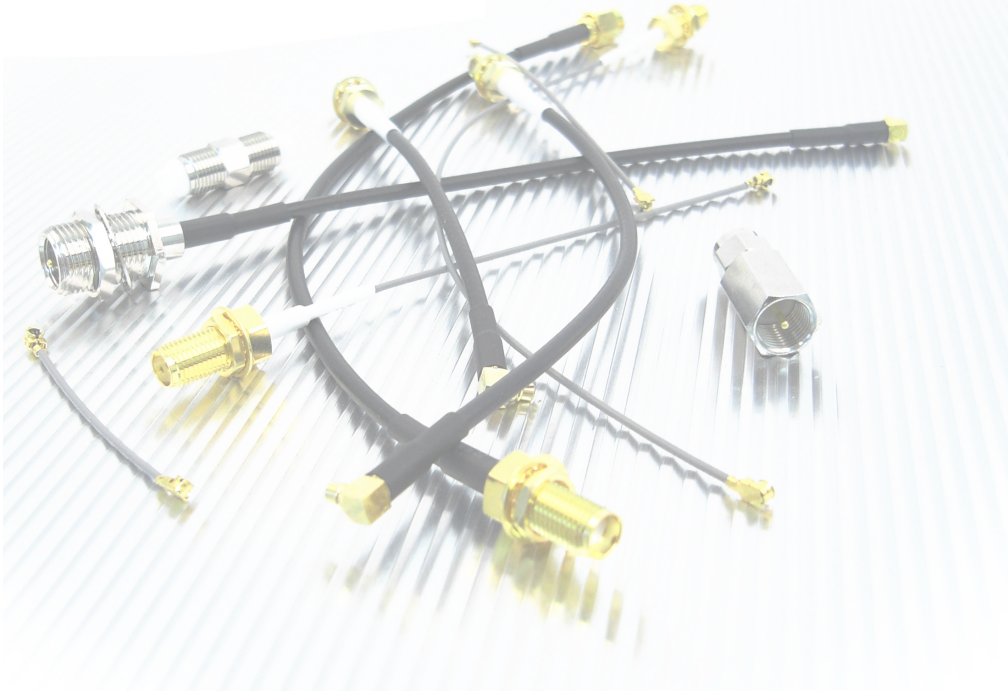
Custom cable assemblies in 10 days

Siretta is the top RF cable assembly manufacturer in the UK. We have many standard RF cable types and variations in stock. In just 10 days, we can assemble your customised requests and/or design a cable suited for your application.

Meeting our customers needs

For custom cables we will make a price quotation and after the price has been approved by you, we will provide technical drawings for your approval.

Each RF cable assembly is 100% signal continuity tested, in process and at completion. Our on-going quality control inspection guarantees every customer will receive the ultimate in quality cables.



RF Internal Cables

Our Most Popular Range of RF Internal Cables

Our internal RF cables are available in all cable styles as shown in the table on page 74.

Some internal cables are more popular than others. The popular styles we strive to have high availability on and we are continuously manufacturing them. Other combinations are less popular but can be made quickly with low minimum order quantities.

WE ONLY SUPPLY QUALITY CONNECTORS AND CABLES WITH ASSEMBLY TO MATCH AND AT A GREAT PRICE POINT.

	Connector A	Connector B	Cable Type	Cable Length	Part No
	GSC	SMA Female Bulkhead	0.81mm coax	100mm 150mm 200mm	ASMI010X081S11 ASMI015X081S11 ASMI020X081S11
	GSC	FME Male Bulkhead	0.81mm coax	100mm 150mm 200mm	ASMI010Y081S11 ASMI015Y081S11 ASMI020Y081S11
	MCF (GSC)	MCF (GSC)	0.81mm coax	50mm 100mm 150mm	ASMI010I081S11 ASMI015I081S11 ASMI005I081S11
	uFL / IPEX	SMA Female Bulkead	1.13mm coax	100mm 150mm 200mm 300mm	ASMG010X113S11 ASMG015X113S11 ASMG020X113S11 ASMG030X113S11
	uFL / IPEX	uFL / IPEX	1.13mm coax	50mm 100mm 150mm	ASMG010G113S11 ASMG015G113S11 ASMG005G113S11
	MMCX Male RA	SMA Female Bulkhead	RG174	100mm 150mm 200mm 250mm	ASMK010X174S11 ASMK015X174S11 ASMK020X174S11 ASMK025X174S11

RF Extension Cables

Our Most Popular Range of RF Extension Cables

At Siretta we have produced a collection of off-the-shelf or short delivery RF extension cables in RG174 and RG58 cable styles. These are high quality cables made to a high standard using quality components. Availability, quality and a great price point is the philosophy of Siretta RF cables.

Extension cables are suitable for either direct connection to antennas that feature a pigtail and connector output, such as the Oscar range, or for extending existing cable runs to a longer distance.

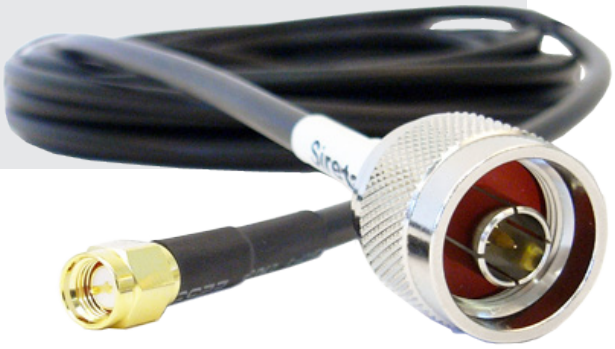
Our cables assemblies utilitise RG58 and RG174 cables, with a choice of SMA, FME, TNC and N-Type popular connector types. Standard cable lengths offered are 3m, 5m and 10m, although consideration should be given to minimising the overall cable length wherever possible to minimise losses. This is especially important in locations with limited reception.

Please also review our low loss RF cables as we have the same philosophy of quality, availability and a great price point for this range too.

Low Loss Extension Cables

We offer our low loss extension cables in longer length than the standard extension cables. Customers should consider using these extension cables for very long length to be sure the signal loss in minimised.

- » HIGH AVAILABILITY
- » POPULAR LENGTHS
- » QUALITY COMPONENT & BUILD
- » COMPETITIVE PRICING



Low Loss LLC100A Extension Cables

(RG174 replacement)

Connector A	Connector B	Cable Length	Part No	High Stock Availability
SMA Male	SMA Female	3m 5m 10m	ASMA300B174L13 ASMA500B174L13 ASMA1000B174L13	✓ ✓
SMA Male	FME Female	3m 5m 10m	ASMA300F174L13 ASMA500F174L13 ASMA1000F174L13	✓ ✓
SMA Male	MCX Male	3m 5m 10m	ASMA300T174L13 ASMA500T174L13 ASMA1000T174L13	
SMA Male	MMCX Male	3m 5m 10m	ASMA300L174L13 ASMA500L174L13 ASMA1000L174L13	
FME Male	MCX Male	3m 5m 10m	ASME300T174L13 ASME500T174L13 ASME1000T174L13	
FME Female	FME Male	3m 5m 10m	ASMF300E174L13 ASMF500E174L13 ASMF1000E174L13	✓ ✓
FME Female	MCX Male	3m 5m 10m	ASMF300T174L13 ASMF500T174L13 ASMF1000T174L13	

Low Loss LLC200A Extension Cables

(RG58 replacement)

	Connector A	Connector B	Cable Length	Part No	High Stock Availability
	SMA Male	SMA Female	3m 5m 10m 15m 20m	ASMA300B058L13 ASMA500B058L13 ASMA1000B058L13 ASMA1500B058L13 ASMA2000B058L13	
	SMA Male	FME Female	3m 5m 10m 15m 20m	ASMA300F058L13 ASMA500F058L13 ASMA1000F058L13 ASMA1500F058L13 ASMA2000F058L13	
	SMA Male	N-Type Male	3m 5m 10m 15m 20m	ASMA300R058L13 ASMA500R058L13 ASMA1000R058L13 ASMA1500R058L13 ASMA2000R058L13	
	FME Male	FME Female	3m 5m 10m 15m 20m	ASME300F058L13 ASME500F058L13 ASME1000F058L13 ASME15000F058L13 ASME2000F058L13	
	TNC Male	SMA Male	3m 5m 10m 15m 20m	ASMZG300A058L13 ASMZG500A058L13 ASMZG1000A058L13 ASMZG1500A058L13 ASMZG2000A058L13	
	TNC Male	FME Female	3m 5m 10m 15m 20m	ASMZG300F058L13 ASMZG500F058L13 ASMZG1000F058L13 ASMZG1500F058L13 ASMZG2000F058L13	

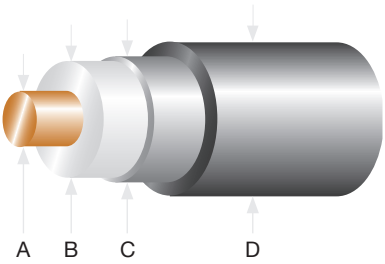
RG174 Extension Cables

Connector A	Connector B	Cable Length	Part No	High Stock Availability
SMA Male	SMA Female	0.5m 1m 3m	ASMA050B174S13 ASMA100B174S13 ASMA300B174S13	 ✓ ✓
SMA Male	FME Female	0.5m 1m 3m	ASMA050F174S13 ASMA100F174S13 ASMA300B174S13	 ✓ ✓
SMA Male	MCX Male	0.5m 1m 3m	ASMA050T174S13 ASMA100T174S13 ASMA300T174S13	
SMA Male	MMCX Male	0.5m 1m 3m	ASMA050L174S13 ASMA100L174S13 ASMA300L174S13	
FME Male	MCX Male	0.5m 1m 3m	ASME050T174S13 ASME100T174S13 ASME300T174S13	
FME Female	FME Male	0.5m 1m 3m	ASMF050E174S13 ASMF100E174S13 ASMF300E174S13	 ✓ ✓
FME Female	MCX Male	0.5m 1m 3m	ASMF050T174S13 ASMF100T174S13 ASMF300T174S13	

RG58 Extension Cables

	Connector A	Connector B	Cable Length	Part No	High Stock Availability
	SMA Male	SMA Female	3m 5m	ASMA300B058S13 ASMA500B058S13	✓
	SMA Male	FME Female	3m 5m	ASMA300F058S13 ASMA500F058S13	✓
	SMA Male	N-Type Male	3m 5m	ASMA300R058S13 ASMA500R058S13	✓
	FME Male	FME Female	3m 5m	ASME300F058S13 ASME500F058S13	
	TNC Male	SMA Male	3m 5m 10m	ASMZG300A058S13 ASMZG500A058S13 ASMZG1000A058S13	✓ ✓
	TNC male	FME Female	3m 5m	ASMZG300F058S13 ASMZG500F058S13	✓

RF Cables Sizes



Cable Type	Connector types	Min Bend Radius	Dimensions (mm)				Insulator Material
			A Core	B Insulator	C Shield	D Jacket	
0.81mm	u.FL, IPEX, MHF2, GSC, HSSC	3.24	0.15	0.4	0.65	0.81	PFA
1.13mm	u.FL, GSC, IPEX, SMA, FME, SMB, TNC, TNX, MMCX	4.5	0.24	0.68	0.9	1.13	FEP
1.13mm *	u.FL, GSC, IPEX, SMA, FME, SMB, TNC, TNX, MMCX	4.5	0.22	0.7		1.13	FEP
1.32mm	IPEX, GSC, SMA, FME, SMB, TNC, MCX, MMCX		0.22	0.7		1.32	FEP
1.37mm	u.FL, IPEX, GSC, SMA, FME, SMB, TNC, MCX, MMCX	9	0.32	0.92		1.37	FEP
1.48mm	HFL, IPEX, GSC, SMA, MMCX, MCA, SMB, FME	9	0.31	0.86		1.48	FEP
RG178	IPEX, MHF, MMCX, MCX, SSMB, SMA, FME	9	0.31	0.86		1.8	FEP
RG316	MMCX, SMA, FME, SMB		0.53	1.53		2.53	FEP
RG174	SMA, SMB, MMCX, MCX, FME, TNC, BNC	10.5	0.48	1.55		2.7	XLPE
RG42	SMA	10	0.94	2.95		3.06	Solid PTFE
RG58	SMA, SMB, BNC. TNC, UHF, N	20	19 x 0.18	2.95		4.95	PE

Low Loss Cables

LLC100A	SMA, SMB, MMCX, MCX, FME, TNC, BNC	6.4	0.46	1.52	2.11	2.79	Solid PE
LLC200A	SMA, SMB, BNC. TNC, UHF. N	20	10.2	2.9	3.4	5	Foam PE
RG213	N-type		2.3	7.24		10.3	PE

PFA	Cross linked poly ethylene
FEP	Fluorinated ethylene propylene - similar to PTFE but flexy - much higher temp before melting
PFA	Perfluoroalkoxy - similar to PTFE but flex
PE	Polyethylene
PVC	Poly Vinyl Chloride
PTFE	Polytetrafluoroethylene

u.FL, IPEX and GSC connectors:	
u.FL	Four types depending on cable size.
IPEX	There are 4 sizes - MHF, MHF2, MHF3, MHF4 (smallest). Dictated by cable size. Std is MHF 2.5mm height.
GSC	Only one size.

Check small connector guide details

Jacket Material	Loss dB/M @ 2GHz	Frequency Range	Comments
PFA	4.4	to 6GHz	Internal antenna pigtails
FEP	3.2	to 6GHz	Most popular cable for internal use. Internal antenna pigtals, internal to bulkhead connector cable.
FEP	2.2	to 6GHz	* Low loss verison of the standard 1.13mm
FEP	2.8	to 6GHz	
FEP	2.4 @2.5GHz	to 6GHz	Has same size conductor as 1.48mm and RG178 cable, but smaller overall diameter, similar cable loss but more flexible in limited space.
FEP		to 6GHz	1.48mm is the most popular thin RF coaxial cable.
FEP	2.6 @1.8GHz	to 6GHz	
FEP	2.06 @2.4GHz	to 3GHz	Used internally instead of RG174. RG136 can go high temp and is more flexible.
PVC	1.175 @1GHz	to 6GHz	This is the most popular cable for GPS and GSM antennas. Low temp spec.
N/A	0.58	to 6GHz	Outer jacket - tin soaked braid. Semi rigid cable
PVC	1.06 @2.4GHz	to 6GHz	Standard RF cable for outside use.
PVC	1.15	to 6GHz	Low loss version of RG174 and much more flexible
PVC	0.15 @200MHz	to 6GHz	*Low loss version of the standard RG58.
PVC	0.25 @900MHz	to 6GHz	Low loss cable for the base station industry.

About RF Connectors and Adaptors

A range of high quality connector and adaptor products, suitable for the production of new cable assemblies, the re-termination of existing cables, or for providing compatibility to existing cables or equipment.

RF Adaptors

Adaptors are especially suitable for extending or joining cable runs or equipment terminated with alternative connector types, avoiding the need to re-terminate or change the existing installation. Adaptors may be used either as a temporary solution to provide compatibility, or for permanent installation into a working system.

RF Connectors

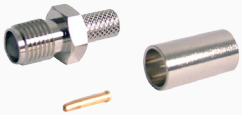
Connector products are offered in the popular SMA, FME and MMCX styles, for cable types RG58 and RG174. All connectors are designed for crimp termination, producing a reliable and high performance connection for a variety of wireless applications.

For more information contact:

+44 (0)118 976 9014

RF Connectors

Our Most Popular Range of RF Connectors

	RG174	RG58
SMA Male & RP Crimp		
SMA Female Crimp		
MMCX RA Crimp		-
FME Female Crimp		
FME Male Crimp		

RF Adaptors

Our Most Popular Range of RF Adaptors

	Connector A	Connector B	Part No
	SMA Male	SMA Male	ADAPT/SMAM/SMAM
	SMA Male	SMA Female	ADAPT/SMAM/SMAF
	SMA Male	SMA Male RP	ADAPT/SMAM/SMAM/RP
	SMA Male	SMA Female RP	ADAPT/SMAM/SMAF/RP
	SMA Male	SMA Female RA	ADAPT/SMAM/SMAF/RA
	SMA Female	SMA Female	ADAPT/SMAF/SMAF
	SMA Female	SMA Male RP	ADAPT/SMAF/SMAM/RP

	Connector A	Connector B	
	SMA Female	SMA Female RP	ADAPT/SMAF/SMAF/RP
	SMA Female	TNC Male	ADAPT/SMAF/TNCM
	FME Male	SMA Male	ADAPT/FMEM/SMAM
	FME Male	SMA Female	ADAPT/FMEM/SMAF
	FME Male	FME Male	ADAPT/FMEM/FMEM
	FME Male	FME Female	ADAPT/FMEM/FMEF
	FME Male	TNC Male	ADAPT/FMEM/TNCM
	FME Female	SMA Male	ADAPT/FMEF/SMAM
	FME Female	SMA Female	ADAPT/FMEF/SMAF

	Connector A	Connector B	
	FME Female	FME Female	ADAPT/FMEF/FMEF
	SMB Male	SMA Female	ADAPT/SMBM/SMAF
	MMCX Male	SMA Female	ADAPT/MMCXM/SMAF
	MMCX Female	SMA Male	ADAPT/MMCXF/SMAM
	MCX Male	FME Male	ADAPT/MCXM/FMEM
	MCX Female	SMA Male	ADAPT/MCXF/SMAM
	MCX Female	FME Male	ADAPT/MCXF/FMEM
	N-Type Male	SMA Female	ADAPT/N-TYPEM/SMAF

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